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Print

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L6: Entry 5 of 11

File: PGPB

May 6, 2004

PGPUB-DOCUMENT-NUMBER: 20040085580
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040085580 A1

TITLE: Method for printing multiple jobs

PUBLICATION-DATE: May 6, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kelleher, Denis Kieran	Palm Harbor	FL	US	
Kent, Bradley D.	Palm Harbor	FL	US	
Cohn, Warren G.	Oldsmar	FL	US	

APPL-NO: 10/ 375445 [PALM]
DATE FILED: February 27, 2003

RELATED-US-APPL-DATA:

Application is a non-provisional-of-provisional application 60/424096, filed November 6, 2002,

INT-CL: [07] G06 F 15/00, G06 K 1/00

US-CL-PUBLISHED: 358/001.18; 358/001.15

US-CL-CURRENT: 358/1.18; ~~358/1.15~~

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system and method for merging and printing multiple postal presorted print jobs into a single print run for discounted rate mailing. The method includes merging mail recipient address lists from several print job orders into a merged recipient address list. The method further includes associating printing content provided by a print job order requestor with each recipient in the merged mail recipient address list. The method also includes printing mailpieces in a presorted sequence by selectively applying associated printing content for each mail recipient in a presorted merged mail recipient address list. Accordingly, several small targeted mailing print jobs, each individually too small to qualify for mailing discounts, can be merged into a larger, presorted print run collectively eligible for mailing discounts.

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to a provisional application filed on Nov. 6, 2002 having application No. 60/424,096, the specification of which is

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L6: Entry 10 of 11

File: PGPB

Apr 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020040374
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020040374 A1

TITLE: Method for personalizing and customizing publications and customized
publications produced thereby

PUBLICATION-DATE: April 4, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kent, Donald A.	Carmel	IN	US	

APPL-NO: 09/ 969229 [\[PALM\]](#)
DATE FILED: September 29, 2001

RELATED-US-APPL-DATA:

Application is a non-provisional-of-provisional application 60/237539, filed
October 4, 2000,

INT-CL: [07] [G06](#) [F](#) [17/00](#)

US-CL-PUBLISHED: 707/516

US-CL-CURRENT: ~~715/516~~

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A method of producing a mass distributed publication through the creation of a plurality of subscriber specific versions, includes obtaining subscriber profile information relating to the nature of the subscriber's content preferences. A content database is provided that contains a plurality of content items. A computer is employed to select content items from the content databases, based upon the subscriber's content preferences. The selected items are forwarded to a high speed printer capable of printing at least one hundred pages per minute. The pages printed by the digital printer are then assembled into a unitary publication.

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Generate Collection

Print

L5: Entry 5 of 6

File: USPT

Apr 5, 1977

US-PAT-NO: 4016549

DOCUMENT-IDENTIFIER: US 4016549 A

TITLE: Scanning and selection methods and apparatus therefor

DATE-ISSUED: April 5, 1977

INT-CL: [02] G06F 3/12

US-CL-ISSUED: 340/172.5

US-CL-CURRENT: 358/1.7; 358/1.16

FIELD-OF-SEARCH: 340/172.5, 445/1, 235/61.9, 355/14

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[Generate OACS](#)

Search Results - Record(s) 1 through 10 of 11 returned.

☐ 1. Document ID: US 20040243481 A1

Using default format because multiple data bases are involved.

L6: Entry 1 of 11

File: PGPB

Dec 2, 2004

PGPUB-DOCUMENT-NUMBER: 20040243481
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040243481 A1

TITLE: System and method for rapidly customizing design, manufacture and/or selection of biomedical devices

PUBLICATION-DATE: December 2, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bradbury, Thomas J.	Yardley	PA	US	
Gaylo, Christopher M.	Princeton Junction	NJ	US	
Fairweather, James A.	West Haven	CT	US	
Chesmel, Kathleen D.	Cream Ridge	NJ	US	
Materna, Peter A.	Metuchen	NJ	US	
Youssef, Adolphe	Kendall Park	NJ	US	

US-CL-CURRENT: 705/26; 705/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Draw. Des
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☐ 2. Document ID: US 20040236640 A1

L6: Entry 2 of 11

File: PGPB

Nov 25, 2004

PGPUB-DOCUMENT-NUMBER: 20040236640
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040236640 A1

TITLE: System for producing on-line content from web sites on demand

PUBLICATION-DATE: November 25, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kassan, Peter	Dobbs Ferry	NY	US	

US-CL-CURRENT: 705/27

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMMC	Draw. De
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☐ 3. Document ID: US 20040163562 A1

L6: Entry 3 of 11

File: PGPB

Aug 26, 2004

PGPUB-DOCUMENT-NUMBER: 20040163562

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040163562 A1

TITLE: System and method for register mark recognition

PUBLICATION-DATE: August 26, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lewis, Clarence A. JR.	Casco	ME	US	
Lewis, Richard Dale	Windham	NH	US	
Lewis, James Edward	Boston	MA	US	

US-CL-CURRENT: 101/485

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMMC	Draw. De
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☐ 4. Document ID: US 20040145108 A1

L6: Entry 4 of 11

File: PGPB

Jul 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040145108

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040145108 A1

TITLE: Flyless stream shingling and stream merging apparatus and method

PUBLICATION-DATE: July 29, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Desaulniers, Edward	St-Lambert	VA	CA	
Lovaghy, John	Mascouche		CA	
Classen, Robert	Winchester		US	

US-CL-CURRENT: 271/69

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMMC	Draw. De
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☐ 5. Document ID: US 20040085580 A1

L6: Entry 5 of 11

File: PGPB

May 6, 2004

PGPUB-DOCUMENT-NUMBER: 20040085580

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040085580 A1

TITLE: Method for printing multiple jobs

PUBLICATION-DATE: May 6, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kelleher, Denis Kieran	Palm Harbor	FL	US	
Kent, Bradley D.	Palm Harbor	FL	US	
Cohn, Warren G.	Oldsmar	FL	US	

US-CL-CURRENT: 358/1.18; 358/1.15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Draw. D
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☐ 6. Document ID: US 20030103234 A1

L6: Entry 6 of 11

File: PGPB

Jun 5, 2003

PGPUB-DOCUMENT-NUMBER: 20030103234

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030103234 A1

TITLE: Image retouching program

PUBLICATION-DATE: June 5, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Takabayashi, Nobuhisa	Nagano-ken		JP	
Hoshino, Masaru	Nagano-ken		JP	
Hatta, Atsushi	Nagano-ken		JP	

US-CL-CURRENT: 358/1.15; 358/308

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Draw. D
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☐ 7. Document ID: US 20030004824 A1

L6: Entry 7 of 11

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030004824

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030004824 A1

TITLE: Method and system for customized mail piece production utilizing a data center

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Joshi, Uday W.	Wilton	CT	US	
Mould, Richard	Greenwich	CT	US	

US-CL-CURRENT: 705/26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 8. Document ID: US 20020065741 A1

L6: Entry 8 of 11

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020065741

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020065741 A1

TITLE: Distributing images to multiple recipients

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Baum, Daniel R.	Menlo Park	CA	US	

US-CL-CURRENT: 705/26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 9. Document ID: US 20020059049 A1

L6: Entry 9 of 11

File: PGPB

May 16, 2002

PGPUB-DOCUMENT-NUMBER: 20020059049

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020059049 A1

TITLE: System and method for rapidly customizing design, manufacture and/or selection of biomedical devices

PUBLICATION-DATE: May 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bradbury, Thomas J.	Yardley	PA	US	

Gaylo, Christopher M.	Princeton Junction	NJ	US
Fairweather, James A.	West Haven	CT	US
Chesmel, Kathleen D.	Cream Ridge	NJ	US
Materna, Peter A	Metuchen	NJ	US
Youssef, Adolphe	Kendall Park	NJ	US

US-CL-CURRENT: [703/11](#); [264/219](#), [264/308](#), [264/40.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMC	Draw De
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☐ 10. Document ID: US 20020040374 A1

L6: Entry 10 of 11

File: PGPB

Apr 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020040374

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020040374 A1

TITLE: Method for personalizing and customizing publications and customized publications produced thereby

PUBLICATION-DATE: April 4, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kent, Donald A.	Carmel	IN	US	

US-CL-CURRENT: [715/516](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMC	Draw De
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Terms	Documents
(single\$ with print\$ with run\$) and mail\$ and ((combin\$ or merg\$) with (order\$ or design\$))	11

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Generate OACS				

Search Results - Record(s) 11 through 11 of 11 returned.

- ☐ 11. Document ID: AU 2002316556 A1, US 20030004824 A1, WO 2003005275 A1, EP 1412896 A1

Using default format because multiple data bases are involved.

L6: Entry 11 of 11

File: DWPI

Jan 21, 2003

DERWENT-ACC-NO: 2003-220736

DERWENT-WEEK: 200452

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TITLE: Mail generation method for business applications, involves combining orders of different mail designs to produce single print run based on which mails are printed on corresponding print mediums

INVENTOR: JOSHI, U W; MOULD, R

PRIORITY-DATA: 2001US-0898232 (July 2, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>AU 2002316556 A1</u>	January 21, 2003		000	G06F017/60
<u>US 20030004824 A1</u>	January 2, 2003		010	G06F017/60
<u>WO 2003005275 A1</u>	January 16, 2003	E	000	G06F017/60
<u>EP 1412896 A1</u>	April 28, 2004	E	000	G06F017/60

INT-CL (IPC): G06 F 17/60

Full	Title	Citation	Front	Review	Classification	Date	Reference	Export	Import	Claims	FORM	Draw. Co
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
(single\$ with print\$ with run\$) and mail\$ and ((combin\$ or merg\$) with (order\$ or design\$))	11

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L5: Entry 1 of 6

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030004824

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030004824 A1

TITLE: Method and system for customized mail piece production utilizing a data center

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Joshi, Uday W.	Wilton	CT	US	
Mould, Richard	Greenwich	CT	US	

APPL-NO: 09/ 898232 [\[PALM\]](#)

DATE FILED: July 2, 2001

INT-CL: [07] [G06 F 17/60](#)

US-CL-PUBLISHED: 705/26

US-CL-CURRENT: [705/26](#)

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system and method for preparing mail pieces is disclosed. A business provides one or more designs for a mail piece to a data center, which converts the designs to a format suitable for viewing via an on-line network connection utilizing a browser. A custom Web site for the business is created and accessed by the business's employees. A defined design for a mail piece is selected, information to be included on the mail piece is provided, and a mailing list is provided to the data center. Multiple requests for mailings are combined by the data center into a single print run and arranged in a presort sequence to allow for postal discounts. The aggregated mailing is printed, and the entire mailing is mailed by the data center.

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[Generate OACS](#)

Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 20030004824 A1

Using default format because multiple data bases are involved.

L5: Entry 1 of 6

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030004824

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030004824 A1

TITLE: Method and system for customized mail piece production utilizing a data center

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Joshi, Uday W.	Wilton	CT	US	
Mould, Richard	Greenwich	CT	US	

US-CL-CURRENT: 705/26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Drawings
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☐ 2. Document ID: US 6657702 B1

L5: Entry 2 of 6

File: USPT

Dec 2, 2003

US-PAT-NO: 6657702

DOCUMENT-IDENTIFIER: US 6657702 B1

TITLE: Facilitating photographic print re-ordering

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Drawings
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☐ 3. Document ID: US 5136316 A

L5: Entry 3 of 6

File: USPT

Aug 4, 1992

US-PAT-NO: 5136316

DOCUMENT-IDENTIFIER: US 5136316 A

TITLE: Printing press and method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	FIGS	Drawings
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☐ 4. Document ID: US 5043749 A

L5: Entry 4 of 6

File: USPT

Aug 27, 1991

US-PAT-NO: 5043749

DOCUMENT-IDENTIFIER: US 5043749 A

**** See image for Certificate of Correction ****

TITLE: Printing press and method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	FIGS	Drawings
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☐ 5. Document ID: US 4016549 A

L5: Entry 5 of 6

File: USPT

Apr 5, 1977

US-PAT-NO: 4016549

DOCUMENT-IDENTIFIER: US 4016549 A

TITLE: Scanning and selection methods and apparatus therefor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	FIGS	Drawings
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☐ 6. Document ID: US 3975715 A

L5: Entry 6 of 6

File: USPT

Aug 17, 1976

US-PAT-NO: 3975715

DOCUMENT-IDENTIFIER: US 3975715 A

TITLE: Scanning and selection methods and apparatus therefor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	FIGS	Drawings
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Terms

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L4 and ((combin\$ or merg\$) with (order\$ or design\$))

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L2: Entry 1 of 1

File: USPT

Nov 9, 1999

US-PAT-NO: 5982994

DOCUMENT-IDENTIFIER: US 5982994 A

TITLE: Network printer apparatus and LAN network system

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mori; Yoshio	Kawasaki			JP
Abe; Fumitake	Kawasaki			JP
Ishiguro; Keiji	Kawasaki			JP
Ueyama; Satoru	Kawasaki			JP
Ito; Mari	Kawasaki			JP
Sato; Toshimi	Kawasaki			JP
Saitoh; Yasushi	Kawasaki			JP
Kida; Yasunari	Kawasaki			JP

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Fujitsu Limited	Kanagawa			JP	03

APPL-NO: 08/ 676724 [PALM]

DATE FILED: July 8, 1996

PARENT-CASE:

This is a division of application Ser. No. 08/292,110, filed Aug. 17, 1994.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	5-286806	November 16, 1993
JP	6-048423	March 18, 1994

INT-CL: [06] G06 F 15/00

US-CL-ISSUED: 395/114; 395/117

US-CL-CURRENT: 358/1.15; 358/1.18

FIELD-OF-SEARCH: 395/100, 395/101, 395/109, 395/112, 395/114, 395/117, 395/329, 395/800, 395/115, 395/116, 395/294, 395/304, 271/296, 271/298, 271/290, 399/91, 345/522, 345/523, 345/526, 345/508, 358/518, 358/530, 358/448, 358/444, 358/450, 358/453, 358/462, 382/176, 382/266, 382/276, 382/277

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search All

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4995103</u>	February 1991	Tsukada et al.	395/102
<input type="checkbox"/>	<u>5113222</u>	May 1992	Wilson et al.	399/81
<input type="checkbox"/>	<u>5113355</u>	May 1992	Nomura	395/110
<input type="checkbox"/>	<u>5187587</u>	February 1993	Farrell et al.	358/296
<input type="checkbox"/>	<u>5220674</u>	June 1993	Morgan et al.	395/800
<input type="checkbox"/>	<u>5303336</u>	April 1994	Kageyama et al.	395/114
<input type="checkbox"/>	<u>5308058</u>	May 1994	Mandel et al.	271/289
<input type="checkbox"/>	<u>5328169</u>	July 1994	Mandel	271/290
<input type="checkbox"/>	<u>5342034</u>	August 1994	Mandel et al.	270/58.08
<input type="checkbox"/>	<u>5358238</u>	October 1994	Mandel et al.	271/298
<input type="checkbox"/>	<u>5390910</u>	February 1995	Mandel et al.	271/296
<input type="checkbox"/>	<u>5450571</u>	September 1995	Rosekrans et al.	395/500
<input type="checkbox"/>	<u>5467432</u>	November 1995	Ota	395/112
<input type="checkbox"/>	<u>5467434</u>	November 1995	Hower, Jr. et al.	395/114
<input type="checkbox"/>	<u>5475801</u>	December 1995	Brindle et al.	395/114

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 123 806	November 1984	EP	
57-142058	September 1982	JP	
4 18631	January 1992	JP	
4 317 118	November 1992	JP	
5-108961	April 1993	JP	
2 200 818	August 1988	GB	

OTHER PUBLICATIONS

Tanabe, Masatoshi, "Printer Adopter for LAN as "Third Box" for Connecting Printers", Feb. 1, 1993, Nikkei Communications.
 Tsuchiya, Shinichi, "Page Printers for Direct Connections to Net", Oct. 4, 1993, Nikkei Communications.

ART-UNIT: 274

PRIMARY-EXAMINER: Moore; David K.

ASSISTANT-EXAMINER: Garcia; Gabriel I.

ATTY-AGENT-FIRM: Helfgott & Karas, P.C.

ABSTRACT:

A high-speed network printer apparatus which can be used in common by clients having different communication protocols and which can sort out printing jobs into the order of clients. Printing information is supplied from a client which may be a personal computer or a work station through a connector of the printer apparatus. A LAN interface driver receives the printing information and identifies a communication protocol by which the printing information is transferred. A communication protocol controller receives printing information in accordance with a predetermined protocol. A spooling controller, which is coupled to a storage unit which stores the received printing information, creates a queue for printing jobs. A printer controller reads out from the storage unit the printing information corresponding to a printing job of the highest priority which is designated by the queue, and forms a dot image on the basis of the printing information. A printing mechanism prints the image on paper. A mailbox stores printed paper into a designated bin. A printing job table is provided in the printer apparatus, in which each row is allotted to one printing job which includes a field for storing an emulation program name. A registering unit judges whether or not there is a another printing job having the same emulation program name to expedite the printing process.

23 Claims, 71 Drawing figures

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pr: 7/21/01

Serial No.: 09/898,232

KMG - EZeDocs/400 - Products

... one's financial/ ERP data, in order to print ... breakthrough AutoCollating feature to merge multiple spool ... with multiple forms overlays all in a single print run. ...

www.kmgus.com/products_edocs.htm - 24k - Cached - Similar pages

[PDF] Electronic Forms Design Tools For IBM AS/400 Mainframe

File Format: PDF/Adobe Acrobat - View as HTML

... The FlashFORM400 AS/400 facilitates the basic merge operation of AS/400 ... Specifying Covers and Page Inserts - all in a single print run. ... Purchase Order Hi Dean ...

www.lanier.com/pdf/5_14_oms.pdf - Similar pages

Xerox readies to revolutionize printing - TechUpdate - ZDNet

... these is what I'll call "mail merge meets commercial ... driven, every document that emerges from a single print run can be ... than one of each and their order in the ...

techupdate.zdnet.com/techupdate/stories/main/0,14179,2895806,00.html - 39k - Cached - Similar pages

Imaging Resource Newsletter Archive - October 22, 1999

... somewhat, but is generally on the order of \$7 ... different sizes of prints on a single "print run": To print ... This application lets you easily merge people's faces ...

www.imaging-resource.com/IRNEWS/archive/v01/19991022.htm - 31k - Cached - Similar pages

Seybold Interactive Report

... Scitex VPS RIP allow, within a single print run, changes in ... A mail-merge program, capable of producing Scitex ... to import elements in whatever order is suitable ...

www.seyboldreports.com/variable prt/scitex.htm - 19k - Cached - Similar pages

[PDF] Project Phoenix Milestone 2 Report

File Format: PDF/Adobe Acrobat - View as HTML

... PDF file with the option to merge or separate ... Manipulation of the order of units was also very ... for a definite number of copies for a single print run; in the ...

www.hud.ac.uk/schools/phoenix/web_docs/ms2r.pdf - Similar pages

[PDF] Modulus Gold Word Processing

File Format: PDF/Adobe Acrobat

... In order to perform the steps in this chapter, you will need to purchased and installed 4D ... To create a letter which can be used as part of a mail merge or mail ...

www.modulus.co.uk/documentation/Gold%204.1Manuals/PDF%20MANUALS/05.WP.pdf - Similar pages

ind tips.htm

... processing software to do a mail merge, you are ... an advertiser can—in a single print run—communicate an ... Response: +34% Order Size: +25%; Repeat Orders: +48 ...

www.ferranteassoc.com/ind_tips.htm - 43k - Cached - Similar pages

infotechonomics: 04 04

... that got critical acclaim and sold a single print run and still ... sound systems to grow an order of magnitude ... Once these contenders merge or purge one another the ...

www.infotechresearch.com/archive/2004_04_01_archive.html - 87k - Cached - Similar pages

Ridgway's Reprographics Services - Digital Color Laser Printing

... to print each page or piece differently within a single print run. ... response rate and more dollars per order than when ... if you've ever used Mail Merge to grab ...

www.ridgways.com/digital/variable.html - 8k - Supplemental Result - Cached - Similar pages

United States Patent Application: 0040085580

... job orders from senders, each order comprising unique ... print jobs into a single print run for discounted ... for executing stored instructions to merge and print ...

appft1.uspto.gov/.../cohn - 43k - Supplemental Result - Cached - Similar pages

Insert page break help sought! THIS TOPIC IS NOW CLOSED :: MrExcel ...

... 012345 Jun02/IT/L3 After the merge I have ... This process is repeated in order that eventually each ... seperated to individual sheets and a single print run could be ...

www.mrexcel.com/archive/210300/11534.htm - 29k - Supplemental Result - Cached - Similar pages

only for
"email"
not order
for print
design

A+

10/15/02

not
merge "orders"

not
merge diff. orders

?

A

1:00
11:30

A

Interdirected: Updates

... templates (such as invoice forms or order forms) that ... with related print jobs to form a **single print run**. ... user can create new forms layouts, merge with other ...

www.interdirected.com/updates_news7.htm - 8k - Supplemental Result - Cached - Similar pages
Savin Corporation - OMS for AS/400 Overview

... for each print job; Specifying covers and page inserts – all in a **single print run**; ...

A+

FlashFORM400 AS/400 facilitates the basic merge operation of AS/400 spool ...
kansascity.savin.com/Savin/savin_com.nsf/ (All)/OMSforAS400Overview.html - 19k - Supplemental Result - Cached - Similar pages

What is a Graphic Designer

... They can change colors, merge images, blend backgrounds, create a ... for a total of 6,500 in a **single print run**. ... In order to create printer ready materials your ...

www.sailvega.com/NGO%20projects/pages/ pap/pages/What%20is%20a%20Graphic%20Designer.htm - 8k - Supplemental Result - Cached - Similar pages

not



Generate Collection

Print

L5: Entry 3 of 6

File: USPT

Aug 4, 1992

DOCUMENT-IDENTIFIER: US 5136316 A

TITLE: Printing press and method

Abstract Text (1):

A press, and a process of printing a combination of fixed and variable data on such press, wherein printed images being manufactured are created by direct digital driving of an imaging device at normal press speed, optionally followed by one or more processing operations in the case of business forms or the like, as required for a particular job. The content of the printed images can be changed without stopping the press. The press and process uses novel electrostatic printing engines having a direct digital imaging system which can create latent electrostatic images at normal press speeds, including the ability to accommodate substantial speed variations. Together with these printing engines, an electronic imaging system is provided in which fixed (or base) image data and variable image data are combined electronically to drive a single exposure system. Repetitive latent images are formed and developed using a high resolution liquid toner, and the resultant visible image is transferred and fixed to a wide variety of materials, usually in a continuous web. The photoreceptor surface on the drum, on which the images are formed and developed, is also cleaned and thoroughly dried each revolution. The press also has a novel fuser/dryer in which the developer carrier liquid is vaporized from the drum and treated through a catalytic converter to control emissions from the press. Heat from the catalytic treatment of the volatile carrier liquid is utilized as a heat source for air used in the fuser/dryer, thus providing a recuperative system.

Application Filing Date (1):

19910624

Brief Summary Text (3):

Business forms are rapidly increasing in use, particularly single-part forms, and the demand is extending into so-called short run forms, where a customer may only order a relatively small quantity, for example 5,000 to 10,000 forms. The makeready of the press, particularly of the offset printing units or towers, occupies a greater percentage of the total run time in shorter runs. In order to control costs, keep prices reasonable, and still meet the demand for these relatively smaller orders of business forms, the forms manufacturing industry needs a forms press which requires a minimum of makeready, can operate at different speeds (which may vary considerably) up to a reasonably fast printing speed (e.g. 500 ft./min), preferably can make changes in the printed material of the form without time consuming shut-down and makeready, and which has the capability of providing a wide variety of forms.

Brief Summary Text (8):

While the principal novelty of this press resides in unique features of its printing engine (or engines), the combination of these with the processing section results in a synergistic effect that has resulted in a vastly improved and more efficient press for business forms and other applications which require printing information from a data base which changes periodically, and/or printing of job runs where information changes from job to job, and/or printing of forms or copies wherein information changes from one form to the next, or one page to the next.

This unique press also has capability to combine digital image information from two different sources (e.g. memories) into composite digital image data which is then used to drive a single imaging system.

Brief Summary Text (16):

Because of these features, the press and the unique methods of printing have application in a large variety of businesses, to wit, business forms printing, direct mail (promotional) printing, printing of tags and/or labels, government or financial printing, documentation printing (where documents need periodical updating), and check printing.

Brief Summary Text (18):

The printing engine uses a unique form of high speed electrophotographic printing which is capable of continuous printing, preferably on web material, at speeds and sizes, and with resolution and accuracy, essentially equal to offset printing. Images are created in the printing engine by a digital dot-image exposure system which is electronically driven from imaging data which can be refreshed, a page at a time, to produce successive identical copies of desired forms, and which can also be modified without slowing of the printing engine so as to print variable data (e.g. forms numbering or bar coding) or to switch "on the run" to an entirely new form as part of the next job. The direct digital input of the printing engine also allows immediate running of the different related parts of a multi-part form, merging of form information, rapid customizing of standard forms, creation of new forms using high speed electronic digitizing and editing equipment, and the establishment of a digitized library of customer's forms which can be quickly recalled and re-run upon short demand.

Brief Summary Text (20):

A digital imaging device, preferably in the form of a relatively high intensity LED array mounted to extend transversely of the rotating drum surface, operates to discharge the background or non-image areas of the passing drum surface to within a range of substantially lower potential, e.g. 100 to 300 Volts DC, by exposing individual dot areas to focused radiation at a predetermined frequency and intensity, and in area size in the order of 0.0033 inch diameter, whereby the remaining or image areas(s) comprise a latent electrostatic image of the printed portions of the form. The size of these dots or pixels provides an acceptably high resolution image for forms printing, and in fact the resolution is comparable to good quality lithographic offset printing. Solid coverage of desired areas is attainable.

Brief Summary Text (36):

The web path proceeds to a chill roll, where the web passes about a substantial part of the circumference of a water cooled roll. This reduces the temperature of the web approximately to ambient temperature. Then the web path extends through a processing section, the rotating elements of which are driven synchronously with the printing engine(s). This section provides, as required for a given job, cross-perforations, feed holes (which are usually located regularly spaced in margins of a text image), longitudinal perforation, file holes or other special notching for each form, numbering and/or imprinting (if this is not done in the printing engine), and partial perforations as might be needed to define a separable section of a form. In an actual embodiment of the invention, the printing engines and the rotatably driven units of the processing section are driven from a common motor drive via a line shaft and appropriate gear drives.

Brief Summary Text (39):

Accordingly, the primary object of this invention is to provide a press, and a process of printing a combination of fixed and variable data on such press, wherein printed images being manufactured are created by direct digital driving of an imaging device at normal press speed, optionally followed directly by one or more processing operations in the case of business forms or the like, as required for a

particular job; to provide a printing press and process in which the content or arrangement of the printed images can be changed without stopping the press; to provide a press and process with an electrostatic printing engine having a direct digital imaging system which can create latent electrostatic images at normal press speeds, including the ability to accommodate substantial speed variations; to provide an electronic imaging system in which fixed (or base) image data and variable image data are combined electronically to drive a single exposure system; to provide a press and process wherein the latent image is developed using a high resolution liquid toner, and the resultant visible image is transferred and fixed to the material of the forms, such as a continuous paper web; to provide such a press and process in which makeready time between successive forms printing jobs can be significantly reduced, as by at least one order of magnitude; to provide such a press in which the drum, on which the electrostatic image is formed and developed, is also cleaned and thoroughly dried each revolution so as not to interfere with the next charging of the drum; to provide a novel system including a fuser/dryer apparatus in which the carrier liquid is vaporized from the drum and treated through a catalytic converter to control emissions from the press; to provide such a fuser/dryer arrangement wherein heat from the catalytic treatment of the volatile carrier liquid is utilized as a heat source for raising the temperature of air used in the fuser/dryer, thus providing a recuperative system.

Drawing Description Text (16):

FIG. 13 is a view showing a typical forms printing job, namely a numbered bank check, which can be produced expeditiously by the press of this invention.

Detailed Description Text (12):

Light from the LEDs operates to discharge the background or non-image areas of the passing drum surface to a substantially lower potential, for example in the order of +100 to +300 V. DC, by exposing individual dot or pixel areas to radiation at a predetermined frequency, as mentioned, whereby the remaining or image areas(s) comprise a latent electrostatic image of the printed portions of the form. The size of these dots provides an acceptably high resolution (300 dots per inch) image, comparable to good quality lithographic offset printing. This discharging of small drum surface areas, on a digital basis, is accomplished within small tolerances over a range of web speeds from 100 to 300 feet/minute.

Detailed Description Text (96):

There are eight logical press modes which deal directly with the menu interface. Those are the seven menu interface modes and the Start Job mode, which is important in the discussion of the job flow. The Printer Options command is listed on every menu mode screen except for Maintenance. Choosing the Printer Options command provides a sub-menu listing all the available options for the current mode. Besides the Printer Options command, each mode screen has a set of commands allowing transition to different modes, and a structured job flow. Each mode, with its set of commands and Printer Options capabilities is listed below.

Detailed Description Text (98):

The Idle mode exists when there are no current jobs running or being processed to run, and when the press is not in a test print or maintenance mode.

Detailed Description Text (100):

1. Printer Options--The printer options are a) Press Parameters, b) Job Control, c) Font Libraries, d) Base Form Libraries.

Detailed Description Text (108):

Commands 1. Printer Options--a) Press Parameters, b) Job Control, c) Registration

Detailed Description Text (113):

1. Printer Options--a) Press Parameters, b) Job Control, c) Job Parameters, d) Font Libraries, e) Base Form Libraries

Detailed Description Text (120):

1. Printer Options--a) Press Parameters, b) Job Control, c) Job Parameters, and d) Registration

Detailed Description Text (127):

1. Printer Options--a) Press Parameters, b) Job Control, c) Job Parameters, d) Registration

Detailed Description Text (132):

Stop print will stop all imaging of the current job and halt the job flow.

Detailed Description Text (134):

1. Printer Options--a) Press Parameters, b) Job Control, c) Job Parameters, d) Font Libraries, and e) Base Form Libraries

Detailed Description Text (150):

Job Flow--Job flow may be manual or automatic. A manual job flow will cause the SCU to enter the Idle mode and then the Make Ready mode, respectively, before the next incoming job can be run. Thus, the operator will be required to initiate the printing of every new job. However, when job flow is automatic, the SCU will go directly to Start Job mode when a new job is indicated from the host. Thus, job-to-job printing will be automatic if there are no header data errors detected.

Detailed Description Text (156):

Number of total pages exceeded--Printing the total number of pages, as indicated in the job header, has not resulted in an end-of-job indicator from the host.

Detailed Description Text (157):

End of job detected before total pages reached--An end-of-job indicator is received from the host before the total number of pages, as indicated in the job header, have been printed.

Detailed Description Text (162):

Printing a Job

Detailed Description Text (163):

Printing is accomplished by the imaging system on a job-by-job basis. A "job" is considered to be a run of printed pages, all of which use the same on-line resources. The resources which a job may require are made up of baseforms and fonts. A "baseform" is the fixed image which remains constant throughout the life of a job. A job may be identified in terms of its baseforms(s), if it uses them. All variable information is printed in "windows", which are rectangular locations on the page, positioned relative to a corner of the page.

Detailed Description Text (164):

A typical job would be printing a series of accounts-payable checks for a company, an example of which is shown in FIG. 12. The baseform in the example is comprised of fixed data including the check design, such as a square border, border boxes for the check amount, date, and number, and the company's (payor) name and address, the company/payor's account number in MICR code, the bank name and its identification in MICR code, and other text. The variable data is comprised of the check number (in both block numerals and MICR code), the date, the amount, and the recipient's (payee) name and address, and possibly other information such as a control number for accounting purposes. Variable data may change at different rates. For example, the check number would change every image, whereas the date may not change at all in a job. All variable data associated with a particular window is positioned on the page within that window.

Detailed Description Text (167):

1

The present invention has the versatility to handle such printing jobs in different fashion. For example, the fixed data and some variable data such as progressive check numbers, in block and MICR can be printed onto single or multiple check forms, then supplied in zig-zag folded stacks for use in a printer which will add the remaining variable data. It is also possible to print all the fixed and variable data in one pass through the press, particularly where a single part form is sufficient, by merging more of the variable data into a larger job run on the press of this invention. The latter type of operation might be efficient in cases where large quantities of different jobs are available to be run on the press, or a longer job with considerable variable data is to be run, such as a large number of payroll checks for a large corporation.

Detailed Description Text (170):

The imaging system gets its commands for each job from a host processor, via a sixteen-bit parallel port which is later described (see Host Interface). These commands instruct the imaging system what resources to load for each job, and then send the variable data for the job when the job is ready to print. When the first job has completed, the host will then send the resource information for the next job, followed by the variable data, and so on.

Detailed Description Text (172):

After the job header data has been processed and the resources loaded, printing of the job may begin. The host will send the window identifiers and their corresponding data for a page to be printed. Window sizing information and data will be processed by one RIP in each print engine. Windows only need to be sent if their data changes. When the desired windows have been sent, the host will send an end-of-page command indicating that the page is complete. Incorporated in this command will be the number of desired copies of the sent page. The host may then begin sending the data for the next page. When the desired pages have been printed, the host will send an end-of-job command indicating that the job is complete. The host computer may then begin sending the job header data for the next job. The imaging system will begin loading resources for the next job, if available, with a down time between the jobs dependent on the amount of resources to be loaded. The more common the resources between two consecutive jobs, the less the down time. The input format for a job is as follows:

Detailed Description Text (202):

2. There is a mechanical LED offset in the array 70 that is compensated for by clocking out data "early" or "late". In order to prevent visible printed data at the beginning and end of a form, the top and bottom of the image must have at least six lines of white data. Six lines of data at 300 dots/inch corresponds to 0.02 inches. These twelve lines (0.04 inches) can be embedded into the triggering buffer zone, and need not be added to the buffer zone spacing. Normal Sync Mode

Detailed Description Text (281):

From the foregoing description and examples, it will be apparent that the present invention provides methods and apparatus which achieve highly flexible digital printing, on a variety of web materials, with minimum makeready, and with perfecting capability and multi-color capability. This includes the ability to change jobs without press stoppage, and to incorporate variable information (from image to image) in jobs which require such variable data, such as consecutively numbered checks or similar documents. The use of digital electrographic printing with a special liquid developer, the ability constantly to refresh the developer for consistent toner presentation to the electrostatic latent images, and the ability to adjust circumferential and lateral registration of images on the print material (web), especially where more than one printing engine is provided, achieve a significant advance in the art of web printing, and especially in printing of business forms, direct mail advertising, manuals and other printing jobs as previously mentioned.

Detailed Description Paragraph Table (22):

Job Title - ABC Co. Comment - Accounts Payable Checks Page 1000 pixels Length - Knife Sync external Knife Sync 1100 pixels distance - Base form - ABC.rle print engine: 1 x-offset: 0 pixels y-offset: 0 pixels Window #0 (check date) print engine: 1 x-offset: 80 (.times. 16 pixels) y-offset: 200 pixels width: 18 (.times. 16 pixels) height: 100 pixels Window #1 (check number) print engine: 1 x-offset 100 (.times. 16 pixels) y-offset 200 pixels width: 18 (.times. 16 pixels) height: 100 pixels Window #2 (check amount) print engine: 1 x-offset: 84 (.times. 16 pixels) y-offset: 500 pixels width: 34 (.times. 16 pixels) height: 100 pixels Window #3 (recipient's name and address) print engine: 1 x-offset: 30 (.times. 16 pixels) y-offset 650 pixels width: 34 (.times. 16 pixels) height: 200 pixels Fonts Used Windows 0, 12.dlf 1, & 2: Window 3: 14.dlf Header data Start of Job - 3080 Job Title - 3081 2041 2042 2043 2020 2042 2068 2000 A B C C o Comment - 3082 2041 2063 2063 2068 2075 2067 2074 A c c o u n t 2073 2020 2050 2061 2079 2061 2062 206C s P a y a b l 2065 2020 2043 2068 2065 2063 206b 2073 e C h e c k s 2000 Page 3083 2003 20E8 Length - Knife Sync 3084 2002 Implemen- tation - Knife Sync 3085 2004 204C Distance - Base Form - 3086 2048 2061 2072 2072 2069 2073 202E H a r r i s 2072 206C 2065 2000 2001 2000 2000 2000 r l e 2000 Window #0 - 3087 2000 2000 2001 2000 2050 2000 20C8 2000 2012 2000 2064 Window #1 - 3087 2000 2001 2001 2000 2064 2000 20C8 2000 2012 2000 2064 Window #2 - 3087 2000 2002 2001 2000 2054 2001 20F4 2000 2022 2000 2064 Window #3 - 3087 2000 2003 2001 2000 201E 2002 208A 2000 2022 2000 20C8 Load Font - 3088 2031 2032 202E 2064 206C 2066 2000 1 2 . d l f 2001 Load Font - 3088 2031 2034 202E 2064 206C 2066 2000 1 4 . d l f 2001 End of 309F header - Variable data Window 0 - 30A0 2000 2000 401B 405B 4031 4032 406D ESC [1 2 m 4034 402D 4032 4034 402D 4038 4038 400C 4 2 4 8 8 Window 1 - 30A0 2000 2001 4034 4031 4030 4030 4030 4 1 0 0 0 4031 400C 1 Window 2 - 30A0 2000 2002 4024 4035 402C 4030 4030 \$ 5 , 0 0 4030 402E 4030 4030 400C 0 . 0 0 Window 3 - 30A0 2000 2003 401B 405B 4031 4034 406D ESC [1 4 m 4050 4065 406E 407A 4061 4020 4043 406F P e n z a C o 4072 4070 400D 400A 4035 4039 4031 4020 r p 5 9 1 4043 4061 406C 4069 4066 406F 4072 406E C a l i f o r n 4069 4061 4020 4050 406C 402E 400D 400A i a P 1 . 4044 4061 4079 4074 406F 406E 402C 4020 D a y t o n 404F 4048 4020 4020 4034 4035 4034 4031 0 H 4 5 4 1 4034 400C 4 End Page - 30A1 2000 2000 2000 2001 Repeat above variable data commands for any windows which change, until all pages of the job have been printed. End Job- 30FF

CLAIMS:

3. A printing press as defined in claim 2, wherein said exposure means directs discrete beams of radiant energy at a resolution in the order of at least 300 per inch selectively onto said non-image pixel areas,

said developing means including a shoe member contoured to said surface of said cylinder for containing the liquid developer in contact across a substantial area of said surface carrying the electrostatic latent image,

means guiding the web into contact with said photoreceptor surface at a region past said developing means in the direction of rotation of said cylinder, and

means for transferring the toner particles from the latent image and at least part of the carrier liquid onto the web.

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L5: Entry 5 of 6

File: USPT

Apr 5, 1977

DOCUMENT-IDENTIFIER: US 4016549 A

TITLE: Scanning and selection methods and apparatus therefor

Application Filing Date (1):

19760203

Brief Summary Text (6):

A further problem which attaches to substantial expansions in the capability of the scanning and selection circuitry illustrated in FIG. 3 of U.S. Pat. No. 3,700,324 is that while the Mark, No Mark, Don't Care (OFF), Print (SELECT) and/or skip settings required for each selection module are quite simply achieved by an operator together with a choice of appropriate AND and/or OR selection modules to establish desired selective printing when the amount of bit information to be scanned and the selectability provided are within the realm contemplated in the patent, this is quite clearly not the case for substantial expansions in the scanning and selection circuitry considered. This view is taken, as will be readily appreciated by those of ordinary skill in the art, because the choice of appropriate AND and/or OR selection modules together with the imposition of appropriate Mark, No Mark, Don't Care, Print and Skip settings can become quite complex upon a substantial expansion of the scanning and selection circuit illustrated in FIG. 3 of U.S. Pat. No. 3,700,324 and is often beyond the skill of an operator who is not relatively sophisticated in programming techniques. Furthermore, when the number of Mark, No Mark, Don't Care, Print and Skip settings which must be made by an operator of an electrophotographic printing system is substantially increased, the probability of error in such settings is substantially increased and it will be appreciated that erroneous settings in the selection conditions imposed can be quite costly since such errors would not ordinarily be discovered until a selective printing operation has been completed or probably, in the case of the selective printing of the address labels considered in U.S. Pat. No. 3,700,324, an erroneous mailing initiated. Accordingly, for cases where a substantial increase in the bit scanning and processing capability and/or selectability in electrophotographic printing apparatus of the kind considered in U.S. Pat. No., 3,700,324 is required, it would be more desirable if the modes through which selection was achieved as well as the coded bit format appropriate to each mode of selection employed were established by a party skilled in the necessary program arts and once the selection modes and code bit format appropriate therefor ascertained and checked such modes of selection and associated bit format specification, loaded into the electrophotographic printing apparatus through a programming technique whose nature tends to preclude operator injected error.

Detailed Description Text (2):

Referring now to the drawings and more particularly to FIG. 1 thereof, there is shown a generalized block diagram schematically illustrating an exemplary embodiment of the scanning and selection methods and apparatus according to the teachings of the present invention. As will be recalled, the instant invention is set forth in the exemplary embodiment considered herein as if the same were to be incorporated within the electrophotographic printing systems disclosed in U.S. Pat. No. 3,700,324. Therefore, prior to a description of the exemplary embodiment of the scanning and selection methods and apparatus depicted in FIG. 1, a brief description of the electrophotographic printing systems disclosed in U.S. Pat. No.

3,700,324 is considered appropriate to direct the reader's attention to the nature of the subject matter in which the exemplary embodiment of this invention is to be incorporated. Briefly, the electrophotographic printing systems disclosed in U.S. Pat. No. 3,700,324 envision a system wherein coded data cards containing discrete mark and no mark information as well as document information to be selectively printed, are loaded into a reader tray and individually fed past a data scanning station, a document information imaging station and finally into a restack tray. As each card is fed, the mark and no mark code information thereon is optically scanned and thereafter, when the data card reaches the imaging station, the document information therefrom is imaged upon a photo-sensitive drum for continuous electrophotographic processing. Thereafter, the card is fed to the restack tray while the code information is processed in the scanning and selection circuit depicted in FIG. 3 and the document information from each card is electrophotographically processed through the well known steps of charging a portion of the photosensitive drum and imaging information from the data card, onto a charged portion of the photosensitive drum to form a latent electrostatic image of the document information on each card fed. Thereafter, each latent electrostatic image formed is rotated through the continuous electrophotographic processing system employed past a development station wherein charge toner particles may be cascaded thereover to establish a toner image on the photosensitive drum suitable for transfer purposes and subsequently, the developed toner image is rotated to a transfer station whereat a transfer member may be selectively engaged to cause the transfer of the toner image formed for subsequent fusing. These continuous electrophotographic processing steps are employed for the document information on each data card fed so that, as will be readily appreciated by those of ordinary skill in the art, a series of latent electrostatic images are continuously formed on the surface of the photosensitive drum and rotated through the continuous electrophotographic processing steps employed to a development station and a transfer station so as to be available at the transfer station for selective transfer to a web to achieve selective printing.

Detailed Description Text (70):

The function of the second counting arrangement formed by the third and fourth flip flops 113 and 114 is to provide certain convenience indicators for operators employing the instant invention in electrophotographic printing apparatus such as is described in U.S. Pat. No. 3,700,324, in a sorting operation or the like. More particularly, when data cards are selectively sorted according to the teachings of the instant invention, it is desired to permit the alternative use of inappropriate data cards in an all select mode of operation and in addition, in selection mode employing the coded cards described herein, it is desired to count each data card processed while permitting the insertion and detection of specialized deck separator cards without counting or sorting. Thus, in processing apparatus employing the instant invention, it is frequently desired to count every card to be processed for selection purposes as long as such card may be classified according to the teachings of the instant invention or through an all select mode of operation such as is described in U.S. Pat. No. 3,700,324. However, when large deck of cards including, for instance, label information is loaded, separator cards are often interspaced therein to designate different portions of the deck. For example, separator cards might be inserted in a large deck to designate different zip code regional centers or other separator cards might be inserted to define by color or otherwise, places where different decks of data cards have been merged.

Detailed Description Text (214):

The reset input to the skip flip flop 312 is connected through conductor 383 whose input will be further described below. Here however, it is sufficient to appreciate that a reset input will be supplied to the skip flip flop 312 each time a new data card to be scanned is detected and hence, if the skip flip flop 312 is set during any time that selection processing for a given data card being scanned takes place, the setting of the skip flip flop 312 will reset the print flip flop 315 and hold the same reset so that no print output indication may be supplied thereby on

conductor 378 to the input of AND gate 380 during the programs being run for that data card. Therefore, when the output decision pulse on conductor 382 enables the AND gate 380 at the completion of all the program routines run, the input to this AND gate on conductor 378 will be low to prevent a print or low output level on conductor 382 from being produced as a function of all the program selection routines run for that data card. Accordingly, it will be appreciated by those of ordinary skill in the art, that the action of the skip flip flop 312 in holding the print flip flop 315 reset, under these conditions, establishes the appropriate priority between a skip and a print condition in that regardless of the number of print signals supplied on conductor 375 to the print flip flop 315, if a skip signal is generated and loaded into the skip flip flop 312 during any selection sequence associated with a given card, the skip flip flop 312 will prevent a print indication from being provided for the card being scanned. Furthermore, it will be appreciated that the print and skip flip flops 312 and 315 act to accumulate print and skip information obtained from each of the programs run for a given data card undergoing a selection process so that at the completion of all the program routines stored, only a single print or skip indication will be provided.

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WEST Search History

DATE: Wednesday, February 16, 2005

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=PGPB,USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L13	L2 and l11	3
		<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L12	L11 and l4	3
<input type="checkbox"/>	L11	L10 or l8 or l9	6674
<input type="checkbox"/>	L10	355/40,77.ccls.	2792
<input type="checkbox"/>	L9	358/1.18,1.7,1.16,1.15.ccls.	2856
<input type="checkbox"/>	L8	705/26.ccls.	1048
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<input type="checkbox"/>	L7	=20010702	0
<input type="checkbox"/>	L6	(single\$ with print\$ with run\$) and mail\$ and ((combin\$ or merg\$) with (order\$ or design\$))	11
		<i>DB=PGPB,USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L5	L4 and ((combin\$ or merg\$) with (order\$ or design\$))	6
<input type="checkbox"/>	L4	L3 and (print\$ with (job\$ or task\$ or step\$ or order\$))	39
<input type="checkbox"/>	L3	=20010702	55
<input type="checkbox"/>	L2	(single\$ with print\$ with run\$) and mail\$	81
		<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L1	(single\$ with print\$ with run\$) and mail\$	58

END OF SEARCH HISTORY

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L13: Entry 1 of 3

File: USPT

Aug 10, 2004

US-PAT-NO: 6775019

DOCUMENT-IDENTIFIER: US 6775019 B1

TITLE: PRINTER HAVING A PLURALITY OF LOGICAL PRINTERS THEREIN AND HAVING A CONTROL UNIT WHICH CONTROLS THE LOGICAL PRINTERS SO AS TO PRINT A VIRTUAL PRINTING PROCESS OF ONE PAGE AT A TIME, THUS ACTUALLY PRINTING DATA FOR A SINGLE PAGE

DATE-ISSUED: August 10, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sakurai; Kazuhiko	Kawasaki			JP
Yokoyama; Kazuo	Kawasaki			JP

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Fuji Xerox Co., Ltd.	Tokyo			JP	03

APPL-NO: 08/ 444517 [\[PALM\]](#)

DATE FILED: May 19, 1995

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	6-225335	September 20, 1994

INT-CL: [07] [B41](#) [B](#) [1/00](#)

US-CL-ISSUED: 358/1.15; 358/1.13

US-CL-CURRENT: [358/1.15](#); [358/1.13](#)

FIELD-OF-SEARCH: 392/101, 392/109, 392/112, 392/114, 392/116, 392/117, 392/164, 358/402, 358/403, 358/296

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	4965771	October 1990	Morikawa et al.	395/112
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<input type="checkbox"/>	5274461	December 1993	Mitsubishi	358/296

<input type="checkbox"/>	<u>5299296</u>	March 1994	Padalino et al.	395/112
<input type="checkbox"/>	<u>5303336</u>	April 1994	Kageyama et al.	395/114
<input type="checkbox"/>	<u>5371837</u>	December 1994	Kimber et al.	395/114
<input type="checkbox"/>	<u>5467434</u>	November 1995	Hower, Jr. et al.	395/114
<input type="checkbox"/>	<u>5511149</u>	April 1996	Hayano	395/112
<input type="checkbox"/>	<u>5559933</u>	September 1996	Boswell	395/114
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FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
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06-161684	June 1994	JP	
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Complete English language Translation of Office Action from the Japanese Patent Office in the counterpart Japanese Patent Application (JP Application No. HEI 6-225335) mailed Apr. 17, 2001.

ART-UNIT: 2624

PRIMARY-EXAMINER: Garcia; Gabriel I.

ATTY-AGENT-FIRM: Staas & Halsey LLP

ABSTRACT:

The present invention relates to a printer that can print effectively print requests from plural terminals. The printer includes a print execution unit and a control unit for controlling the operation of the print execution unit. The control unit controls the operation of the print execution unit in response to an external print request to perform a printing operation. The control unit also includes plural logical printers each which performs a virtual printing process corresponding to plural jobs. The control unit controls the operation of the print execution unit when each of the logical printers has completed a virtual printing operation for the page, and thus prints actually data for one page. The printer is applicable to a remote printer which prints in response to a print request from a terminal via a network such as a LAN.

19 Claims, 33 Drawing figures

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Generate Collection

Print

L13: Entry 2 of 3

File: USPT

Dec 2, 2003

US-PAT-NO: 6657702

DOCUMENT-IDENTIFIER: US 6657702 B1

TITLE: Facilitating photographic print re-ordering

DATE-ISSUED: December 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Chui; Jimmy Pig Fai	Redwood City	CA		
Loh; Danny D.	Fremont	CA		
Baum; Daniel R.	Menlo Park	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Shutterfly, Inc.	Redwood City	CA			02

APPL-NO: 09/ 450923 [\[PALM\]](#)

DATE FILED: November 29, 1999

PARENT-CASE:

This application is a continuation in part of U.S. provisional patent applications S/No. 60/151,533, filed Aug. 31, 1999; Ser. No. 60/159,372, filed Oct. 14, 1999; Ser. No. 09/428,871, filed Oct. 27, 1999; Ser. No. 09/436,704, filed Nov. 9, 1999; and Ser. No. 60/167,243, entitled "Digital Photo Printing Service", filed Nov. 24, 1999, the contents of which are hereby incorporated by reference.

INT-CL: [07] [G03 B 27/52](#), [G03 B 27/32](#), [G03 B 17/48](#), [G06 F 17/60](#)

US-CL-ISSUED: 355/40; 355/77, 358/487, 396/429, 705/26

US-CL-CURRENT: [355/40](#); [355/77](#), [358/487](#), [396/429](#), [705/26](#)

FIELD-OF-SEARCH: 355/40, 355/41, 355/77, 396/310, 396/311, 396/315, 396/319, 396/429, 705/26, 705/27, 709/218, 358/487, 358/527

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

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October 1992

Imamura

355/28

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January 1993

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395/114

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FOREIGN-PAT-NO

PUBN-DATE

COUNTRY

US-CL

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0851292	November 1999	EP
0890877	January 2000	EP
WO 97/39580	October 1997	WO
WO 98/36556	August 1998	WO

OTHER PUBLICATIONS

PCT International Search Report, PCT/US00/40799, Mar. 19, 2001, European Patent Office.

ART-UNIT: 2851

PRIMARY-EXAMINER: Mathews; Alan A.

ATTY-AGENT-FIRM: Tran & Associates

ABSTRACT:

A method facilitates photographic print re-ordering by encoding a photographic print with an identifier identifying a recipient of the photographic print and one or more printing parameters associated with the photographic print.

35 Claims, 16 Drawing figures

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L13: Entry 3 of 3

File: USPT

Apr 5, 1977

US-PAT-NO: 4016549

DOCUMENT-IDENTIFIER: US 4016549 A

TITLE: Scanning and selection methods and apparatus therefor

DATE-ISSUED: April 5, 1977

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hutner; Mark A.	Glenview	IL		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Xerox Corporation	New York	NY			02

APPL-NO: 05/ 654899 [\[PALM\]](#)

DATE FILED: February 3, 1976

PARENT-CASE:

This is a division, of application Ser. No. 409,679, filed Oct. 23, 1975, now U.S. Pat. No. 3,975,715.

INT-CL: [02] G06F 3/12

US-CL-ISSUED: 340/172.5

US-CL-CURRENT: [358/1.7](#); [358/1.16](#)

FIELD-OF-SEARCH: 340/172.5, 445/1, 235/61.9, 355/14

PRIOR-ART-DISCLOSED:

U. S. PATENT DOCUMENTS

[Search Selected](#) [Search ALL](#) [Clear](#)

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	3379106	April 1968	Hewes et al.	355/14
<input type="checkbox"/>	3815094	June 1974	Smith	340/172.5
<input type="checkbox"/>	3834805	September 1974	Griffin, Jr.	355/14
<input type="checkbox"/>	3860793	January 1975	Roe et al.	235/61.9R
<input type="checkbox"/>	3940210	February 1976	Donohue	355/14

ART-UNIT: 237

PRIMARY-EXAMINER: Springborn; Harvey E.

ATTY-AGENT-FIRM: Bacon & Thomas

ABSTRACT:

Scanning and selection methods and apparatus as well as an electrophotographic printing system employing such scanning and selection apparatus are provided in accordance with the teachings of the present invention. In an exemplary embodiment of the invention a plurality of coded data records containing selection information and a plurality of coded data records to be classified for selection purposes are scanned by code sensing devices. Code information from each of the plurality of coded data records containing selection information is loaded in sequence into memory apparatus to store therein the selection conditions to be imposed upon the plurality of coded data records to be classified for selection purposes. The selection information obtained being directed to a plurality of selection considerations and such sequence being arranged in a manner so that each of the plurality of selection considerations is defined in different areas of the memory apparatus. Subsequently code information from each of the plurality of coded data records to be classified is loaded in comparing apparatus for comparison with the selection conditions to be imposed as stored in the memory apparatus, the comparing apparatus acting to impose each of the plurality of selection considerations upon code information from each of the plurality of coded data records to be classified and provide a classification signal for each of the plurality of coded data records to be classified for selection purposes based upon all of the selection considerations imposed.

4 Claims, 8 Drawing figures

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L13: Entry 2 of 3

File: USPT

Dec 2, 2003

DOCUMENT-IDENTIFIER: US 6657702 B1

TITLE: Facilitating photographic print re-ordering

Brief Summary Text (5):

The computer 100 of FIG. 1 also can be connected to various peripheral I/O devices. One of the more popular of such peripheral devices is a digital camera 108 that enables users to take pictures and save them in digital (electronic) format. Typically, the digital camera 108 is connected to the computer 100 only while the user is uploading images to the computer's disk drive or other non-volatile memory 110. Users also can obtain digital images, for example, of film-based prints from a traditional camera, by sending an exposed film into a photo-finishing service, which develops the film to make prints and then scans (or otherwise digitizes) the prints or negatives to generate digital image files. The digital image files then can be transmitted back to the user by e-mail or on a CD-ROM, diskette, or other removable storage medium.

Brief Summary Text (6):

In any event, once the digital images are stored on the computer 100, a user can perform various operations on them. For example, an image viewer application can be used to view the images or a photo editor application can be used to touch-up or otherwise modify the images. In addition, an electronic messaging (e.g., e-mail) application can be used to transmit the digital images to other users.

Brief Summary Text (7):

In addition to viewing the digital images on the computer display 107, users often desire to have hard copies (physical prints) made of digital images. Such hard copies can be generated locally by the user using output devices such as an inkjet printer or a dye sublimation printer. In addition, users can transmit digital images (e.g., either over a computer network or by using a physical storage medium such as a floppy disk) to a photo-finishing service, which can make hard copies of the digital images and send them (e.g., by U.S. Mail or courier service) back to the user.

Brief Summary Text (12):

Upon completing the order, the images are uploaded to the photo-finishing service as indicated by the upload window 258 in FIG. 2F. Once the images are uploaded, the photo-finishing service arranges to have prints made of the selected images and to have the prints mailed to the user and address specified in the contact information window 200. If the user desires to have prints of the same (or different) images sent to another person (e.g., a family member or friend), the user typically must repeat the entire order generating process represented by FIGS. 2A-2F. Generally, repeating the ordering process to send prints to another person involves entering a considerable amount of redundant information and incurring separate charges, including multiple minimum order charges, on the user's credit card (or other financial instrument).

Brief Summary Text (46):

Moreover, users can distribute copies of prints to multiple recipients without having to incur the effort and expense involved in receiving print copies from a photofinisher, sorting the prints into sets according to destinations, putting the

prints in protective envelopes, and then re-mailing the sets of prints to their respective recipients. As a result, sets of prints can be distributed to multiple destinations more quickly and with less expense and effort.

Brief Summary Text (47):

In addition, by employing a non-linear workflow model certain benefits and efficiencies are realized. More particularly, by taking a single multiple-recipient order, breaking it down into sub-orders corresponding to a single recipient, selectively instantiating and re-organizing multiple instances of designated images to build each sub-order, and then printing each sub-order as a separate run of prints for the associated recipient, a single print order (transaction sequence) can be used to order prints to be generated and distributed to multiple recipients. Moreover, such a non-linear workflow tends to increase the efficiency and/or speed of the print generation and distribution tasks dramatically.

Detailed Description Text (12):

Before the user can order prints, the user's images first are transmitted to the photo-finisher (step 400). Such transmission of images can be accomplished in any of several different manners. For example, if the images have been generated with a digital camera or any of various computer software (e.g., a graphics program such as Adobe Photoshop) or hardware devices (e.g., scanner), then the user has the option of transmitting the digital image files to the photofinisher's host computer, for example, over a computer network such as the Internet. Any available protocol (FTP, HTTP, etc.) or electronic communication application (e.g., e-mail, special-purpose software provided by the photo-finisher) could be used for this purpose.

Detailed Description Text (13):

Alternatively, the digital images first could be stored on a physical storage medium (a floppy disk, a read/write CD-ROM, a Flash memory chip, etc.) and then sent to the photo-finisher's place of business by U.S. mail, overnight courier or local delivery service. The photo-finisher then could read the images from the storage medium and return it to the user, potentially in the same package as the user's print order. In addition, the photo-finisher could load data or programs for the user's benefit onto the storage medium before returning it to the user. For example, the photo-finisher could load the storage medium with image viewing or editing software to allow the user to better manage images. The photo-finisher also could load calibration or control data onto the storage medium, which the user could load onto his or her computer to be able to view the images, or print them on a local printer, with improved color accuracy. Alternatively, or in addition, if the storage medium was, for example, a FLASH memory chip of the type used in certain models of digital cameras chip (e.g., SmartMedia.TM. or CompactFlash.TM.), then the photo-finisher could load control data or driver programs in FLASH memory that, when loaded into the digital camera, would modify its behavior, for example, to enhance color accuracy or other performance characteristics. Typically, using FLASH memory in this manner to modify digital camera behavior would require cooperation from, and/or a business arrangement with, one or more digital camera manufacturers.

Detailed Description Text (23):

Distribution and delivery of the prints to recipients could be accomplished by any of various techniques. For example, standard U.S. Mail or courier services (e.g., Federal Express or UPS) could be employed. Alternatively, the photo-finisher could have a business arrangement with various other service or delivery companies to deliver print orders along with other regularly scheduled deliveries. For example, the photo-finisher could have a business arrangement with a delivery or service company (e.g., Webvan, an online grocer in the San Francisco Bay area, or Streamline, Inc., a goods/services/convenience portal head-quartered in the Boston area) in which the prints for a particular recipient would be generated on the delivery/service company's premises and then delivered along with that recipient's

order.

Detailed Description Text (33):

Whether processed immediately or queued up and processed in batches, the establishment of an image-alias association indicates that the user who established the association desires that a print of the designated digital image, or an electronic copy of the digital image, or both, be sent to the recipients represented by the selected distribution alias. To accomplish the latter distribution task (transmitting the designated digital image to the designated recipients), any of various electronic communications techniques could be employed. For example, the digital image could be attached to an e-mail message and sent to each of the recipients automatically (i.e., without further involvement by the sending user). Alternatively, special purpose communication software could be employed to transmit the designated digital image to the specified recipients. For example, a utility similar to an "Instant Messaging" application could be used to push a copy of the digital image to the recipient and cause software executing on the recipient's computer to generate a pop-up display of the digital image that appears automatically on the recipient's computer screen, potentially along with a message such as "A print of this image will be sent to you courtesy of <sender's name>."

Detailed Description Text (36):

The GUI of FIG. 5 represents only one of several alternative mechanisms or interfaces through which users could designate intended recipients of prints. For example, a standard address book metaphor, such as found in certain e-mail applications or personal information manager (PIM) programs, could be used to designate recipients. To do so, the user would select one or more recipients from among the user's address book entries and then specify which images should be printed and distributed to that user or those users. Or the process could proceed in the opposite order--the user could first specify images to be printed and then select one or more recipients from the user's address book. Alternatively, or in addition, the user could simply type in the contact information, for example, using a text entry form or command-line interface, to designate print recipients. Virtually any other mechanism or technique for identifying recipients could be used instead or in addition. For example, the user could access one of the several directory services available on the Internet (e.g., Bigfoot at <http://www.bigfoot.com>) to locate, identify and/or select print recipients.

Detailed Description Text (37):

FIG. 6 shows an example of a data table that could be used to store information relating to a particular distribution alias. As shown therein, the data table 600 in this example corresponds to the user's "Family" distribution alias, and includes six entries or rows 602, one for each of the members 504 of the distribution alias. The data table 600 can include multiple columns 606-612 in which information about each of the members 604 is stored. For example, the data table 600 can include columns for contact information 606 (shipping address, e-mail address, telephone number, etc.), default information (e.g., preferred print size, finish, number of copies, whether digital and physical copies of the image, or both, should be delivered, etc.), and delivery options 610 (e.g., Federal Express, customer pickup, U.S. Postal service, etc.). In addition, the data table 600 can store virtually any other items of information that may be relevant to the print delivery services, for example, personal messages that should be delivered along with the digital image or the physical print or both. Moreover, additional data relating to the distribution alias as a whole (e.g., name, graphic symbol to be used, other functional or aesthetic data, user's payment mechanism, etc.) could be stored along with, or separately from, the data table shown in FIG. 6.

Detailed Description Text (52):

After the order has been generated, it is communicated to the fulfillment enterprise to be filled (step 810). In general, the fulfillment enterprise will

produce the numbers and types of prints specified by the various alias member's preferences, and distribute the resulting prints accordingly, taking into account the member's respective delivery option preferences. In addition, the fulfillment enterprise optionally can send digital copies of the images (e.g., by e-mail) to each specified recipient.

Detailed Description Text (61):

Similarly, these techniques could be applied to allow users to choose or develop a holiday (e.g., Christmas) card design online (including images and other graphics, personalized text, personalized signatures, and/or any type of computer-generated content) and then have physical copies of that design produced (i.e., actual paper-and-ink Christmas cards) and distributed automatically to everyone on the user's Christmas card list. This same concept could be applied to enable users to design physical post cards, wedding or party invitations, thank you cards, and the like produced and distributed. In the same vein, businesses could use these techniques to design targeted mailings (sets of targeted coupons, an advertisement made up of selected text and graphic components, etc.) and have them produced and distributed to specified recipients.

Current US Original Classification (1):

355/40

Current US Cross Reference Classification (1):

355/77

Current US Cross Reference Classification (4):

705/26

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Generate Collection

Print

L13: Entry 1 of 3

File: USPT

Aug 10, 2004

DOCUMENT-IDENTIFIER: US 6775019 B1

TITLE: PRINTER HAVING A PLURALITY OF LOGICAL PRINTERS THEREIN AND HAVING A CONTROL UNIT WHICH CONTROLS THE LOGICAL PRINTERS SO AS TO PRINT A VIRTUAL PRINTING PROCESS OF ONE PAGE AT A TIME, THUS ACTUALLY PRINTING DATA FOR A SINGLE PAGE

Brief Summary Text (15):

The present invention is made to overcome the above mentioned problems. An object of the present invention is to provide a printer that can effectively handle print requests from plural terminals without increasing running costs so that a single printer can functions as if plural printers operate.

Current US Original Classification (1):

358/1.15

Other Reference Publication (1):

Complete English language Translation of Office Action from the Japanese Patent Office in the counterpart Japanese Patent Application (JP Application No. HEI 6-225335) mailed Apr. 17, 2001.

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Print

L13: Entry 3 of 3

File: USPT

Apr 5, 1977

DOCUMENT-IDENTIFIER: US 4016549 A

TITLE: Scanning and selection methods and apparatus therefor

Brief Summary Text (6):

A further problem which attaches to substantial expansions in the capability of the scanning and selection circuitry illustrated in FIG. 3 of U.S. Pat. No. 3,700,324 is that while the Mark, No Mark, Don't Care (OFF), Print (SELECT) and/or skip settings required for each selection module are quite simply achieved by an operator together with a choice of appropriate AND and/or OR selection modules to establish desired selective printing when the amount of bit information to be scanned and the selectability provided are within the realm contemplated in the patent, this is quite clearly not the case for substantial expansions in the scanning and selection circuitry considered. This view is taken, as will be readily appreciated by those of ordinary skill in the art, because the choice of appropriate AND and/or OR selection modules together with the imposition of appropriate Mark, No Mark, Don't Care, Print and Skip settings can become quite complex upon a substantial expansion of the scanning and selection circuit illustrated in FIG. 3 of U.S. Pat. No. 3,700,324 and is often beyond the skill of an operator who is not relatively sophisticated in programming techniques. Furthermore, when the number of Mark, No Mark, Don't Care, Print and Skip settings which must be made by an operator of an electrophotographic printing system is substantially increased, the probability of error in such settings is substantially increased and it will be appreciated that erroneous settings in the selection conditions imposed can be quite costly since such errors would not ordinarily be discovered until a selective printing operation has been completed or probably, in the case of the selective printing of the address labels considered in U.S. Pat. No. 3,700,324, an erroneous mailing initiated. Accordingly, for cases where a substantial increase in the bit scanning and processing capability and/or selectability in electrophotographic printing apparatus of the kind considered in U.S. Pat. No., 3,700,324 is required, it would be more desirable if the modes through which selection was achieved as well as the coded bit format appropriate to each mode of selection employed were established by a party skilled in the necessary program arts and once the selection modes and code bit format appropriate therefor ascertained and checked such modes of selection and associated bit format specification, loaded into the electrophotographic printing apparatus through a programming technique whose nature tends to preclude operator injected error.

Detailed Description Text (214):

The reset input to the skip flip flop 312 is connected through conductor 383 whose input will be further described below. Here however, it is sufficient to appreciate that a reset input will be supplied to the skip flip flop 312 each time a new data card to be scanned is detected and hence, if the skip flip flop 312 is set during any time that selection processing for a given data card being scanned takes place, the setting of the skip flip flop 312 will reset the print flip flop 315 and hold the same reset so that no print output indication may be supplied thereby on conductor 378 to the input of AND gate 380 during the programs being run for that data card. Therefore, when the output decision pulse on conductor 382 enables the AND gate 380 at the completion of all the program routines run, the input to this

AND gate on conductor 378 will be low to prevent a print or low output level on conductor 382 from being produced as a function of all the program selection routines run for that data card. Accordingly, it will be appreciated by those of ordinary skill in the art, that the action of the skip flip flop 312 in holding the print flip flop 315 reset, under these conditions, establishes the appropriate priority between a skip and a print condition in that regardless of the number of print signals supplied on conductor 375 to the print flip flop 315, if a skip signal is generated and loaded into the skip flip flop 312 during any selection sequence associated with a given card, the skip flip flop 312 will prevent a print indication from being provided for the card being scanned. Furthermore, it will be appreciated that the print and skip flip flops 312 and 315 act to accumulate print and skip information obtained from each of the programs run for a given data card undergoing a selection process so that at the completion of all the program routines stored, only a single print or skip indication will be provided.

Current US Original Classification (1):

358/1.7

Current US Cross Reference Classification (1):

358/1.16

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Generate Collection

Print

L5: Entry 2 of 6

File: USPT

Dec 2, 2003

US-PAT-NO: 6657702

DOCUMENT-IDENTIFIER: US 6657702 B1

TITLE: Facilitating photographic print re-ordering

DATE-ISSUED: December 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Chui; Jimmy Pig Fai	Redwood City	CA		
Loh; Danny D.	Fremont	CA		
Baum; Daniel R.	Menlo Park	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Shutterfly, Inc.	Redwood City	CA			02

APPL-NO: 09/ 450923 [\[PALM\]](#)

DATE FILED: November 29, 1999

PARENT-CASE:

This application is a continuation in part of U.S. provisional patent applications S/No. 60/151,533, filed Aug. 31, 1999; Ser. No. 60/159,372, filed Oct. 14, 1999; Ser. No. 09/428,871, filed Oct. 27, 1999; Ser. No. 09/436,704, filed Nov. 9, 1999; and Ser. No. 60/167,243, entitled "Digital Photo Printing Service", filed Nov. 24, 1999, the contents of which are hereby incorporated by reference.

INT-CL: [07] [G03 B 27/52](#), [G03 B 27/32](#), [G03 B 17/48](#), [G06 F 17/60](#)US-CL-ISSUED: [355/40](#), [355/77](#), [358/487](#), [396/429](#), [705/26](#)US-CL-CURRENT: [355/40](#), [355/77](#), [358/487](#), [396/429](#), [705/26](#)

FIELD-OF-SEARCH: 355/40, 355/41, 355/77, 396/310, 396/311, 396/315, 396/319, 396/429, 705/26, 705/27, 709/218, 358/487, 358/527

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

[5159385](#)

October 1992

Imamura

355/28

[5179637](#)

January 1993

Nardozzi

395/114

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<input type="checkbox"/>	<u>5359387</u>	October 1994	Hicks	355/40
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<input type="checkbox"/>	<u>6198526</u>	March 2001	Ohtsuka	348/232
<input type="checkbox"/>	<u>6373551</u>	April 2002	Manico et al.	355/41
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FOREIGN PATENT DOCUMENTS

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COUNTRY

US-CL

0851292	July 1998	EP
0 856 972	August 1998	EP
0 878 956	November 1998	EP
0890877	January 1999	EP
0851292	November 1999	EP
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WO 97/39580	October 1997	WO
WO 98/36556	August 1998	WO

OTHER PUBLICATIONS

PCT International Search Report, PCT/US00/40799, Mar. 19, 2001, European Patent Office.

ART-UNIT: 2851

PRIMARY-EXAMINER: Mathews; Alan A.

ATTY-AGENT-FIRM: Tran & Associates

ABSTRACT:

A method facilitates photographic print re-ordering by encoding a photographic print with an identifier identifying a recipient of the photographic print and one or more printing parameters associated with the photographic print.

35 Claims, 16 Drawing figures

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Dec 2, 2003

US-PAT-NO: 6657702

DOCUMENT-IDENTIFIER: US 6657702 B1

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